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Appln. No.: 10/057/518 .

Amendment Dated: November 7, 2003 Reply to Office Action of August 8, 2003 **KPG-5044US**



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ppln. No:

10/057,518

Applicant:

Kevin Ray, et al.

Filed:

January 24, 2002

Title:

WATER-DEVELOPABLE NEGATIVE-WORKING ULTRAVIOLET AND INFRARED

IMAGEABLE ELEMENT

TC/A.U.:

1756

Examiner:

Daborah Chacko Davis

Confirmation No.: 3061

Docket No.:

KPG-5044US

AMENDMENT

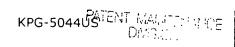
Mail Stop Non-Fee Amendment **Commissioner for Patents** P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Responsive to the Office Action dated August 8, 2003, please amend the aboveidentified application as follows:

\boxtimes	Amendments to the Specification begin on page 2 of this paper.
of this	Amendments to the Claims are reflected in the listing of claims which begins on page paper.
☐ replac	Amendments to the Drawings begin on page of this paper and include an attached ement sheet(s).
☐ Abstra	Amendments to the Abstract are on page of this paper. A clean version of the oct is on page of this paper.
\boxtimes	Remarks/Arguments begin on page 3 of this paper.

Appl. No. 10/057,518



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

US PATENT & TRACE AK

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INFRARED IMAGEABLE ELEMENT

TC/A.U.:

1756

Examiner:

Daborah Chacko Davis

Confirmation No.: 3061

Docket No.:

KPG-5044US

REQUEST FOR REFUND

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Attention: Refund Section, Accounting Division, Office of Finance

SIR:

I. REFUND REQUEST

This is a request for refund with respect to the Amendment filed on **November 7, 2003** for the above-identified application.

AMOUNT OF

II. FEES CHARGED FOR WHICH REFUND IS REQUESTED

		REFUND
	Filing fee	REQUESTED
	Surcharge for filing the basic filing fee on	
	a date later than the filing date of the	
	application (37 CRF 1.16(e))	
	and/or	
	Surcharge for filing the oath or	
	declaration on a date later than	
	the filing date of the	
_	application (37 CFR 1.16(e))	
\bowtie	Extension of time to file reply	
	1 st month	<u>\$110.00</u>

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Appl. No. 10/057,518	PATENT MESSET DENCE

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Excess claims US PATENT & TRADEMARK
☐ Issue fee OFFICE
Petition fee
Patent maintenance fee
maintenance fee
Patent maintenance fee surcharge
Other

TOTAL REFUND REQUESTED

\$110.00

III. EXPLANATION OF WHY CONTESTED CHARGE IS IN ERROR

An Amendment was filed with the U.S. Patent and Trademark Office on November 7, 2003 in response to the Non-Final Office Action dated August 8, 2003. A copy of the documents as filed on November 7, 2003, along with a copy of the date stamped Return Receipt Postcard are attached.

Applicants request a refund of the 1 month extension fee, because the Response to Office Action was filed before the shortened statutory period for reply expired. The Response was filed November 7, 2003, and the shortened statutory period for reply expired November 8, 2003, three months after the Office Action mailing date of August 8, 2003.

The applicants filed the Response under the Provisions of 37 C.F.R. § 1.8(a)(1). The Response was timely filed as it was mailed prior to the expiration of the set period of time (3 months), addressed as set out in 37 C.F.R. § 1.1(a), and deposited with the U.S. Postal Service with sufficient postage as first class mail. The Response included a Certificate of Mailing for each piece of correspondence. The certificate stated the date of deposit as November 7, 2003 and was signed by a person having reasonable basis to expect the correspondence would be mailed or transmitted on or before the date indicated. Because the Response conformed to the requirements of 37 C.F.R. § 1.8(a)(1), the applicants should be afforded the filing date of November 7, 2003.

Appl. No. 10/057,518

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IV. MANNER OF REFUND

US PATENT & TRADEMARK OFFICE

Please make refund by

☑ crediting Account No. 18-0350.

refunding payment.

Respectfully submitted,

Pamela D. Politis, Reg. No. 47,865 Bruce M. Monroe, Reg. No. 33,602 Attorney and Agent for Applicant

Dated: January 9, 2004

RatnerPrestia P.O. Box 1596 Wilmington, DE 19899 (302) 778-2500

The Assistant Commissioner for Patents is hereby authorized to charge payment to Deposit Account No. 18-0350 of any fees associated with this communication.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-7450 on: January 9, 2004/

Regina Poletti

TRANSMITTAL **FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission 13

	Let. :
Application Number	10/057,518
Filing Date	January 24, 2002 15 7, 17
First Named Inventor	RAY
Art Unit	1756 US PATENT & THE DELIGING
Examiner Name	Daborah Chacko Oavis
Attorney Docket No.	KPG-5097US

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Fee Transmittal Form Fee Attached		wing(s) ensing-related Papers		After Allowance Communication to Group
Amendment/Reply After Final Affidavits/Declaration(s) Extension of Time Request Express Abandonment Request Information Disclosure Statement Certified Copy of Priority Document(s) Response to Missing Parts/ Incomplete Application Response to Missing Parts under	Peti Prov Cha Add	tion tion to Convert to a visional Application er of Attorney, Revocation, nge of Correspondence	Req	Appeal Communication to Board of Appeals and Interferences Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) Proprietary Information Status Letter Other Enclosure(s) (please identify below): uest for Refund
37 CFR 1.52 or 1.53	OF APPLI			
	OF APPLI	CANT, ATTORNEY OR AG	ENT	
Firm or Individual Pamela D. Politis		Registration No. (Attorney/Ag	ent)	47,865
Signature That () Mrs	70			
Date January 9, 2004				
CERTIFICATE OF TRANSMISSION / MAILING				
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria. VA 22313-1450 on this date: January 9, 2004				
Name (Print/Type) Regina Poletti				
Signature Segua !	belle		Date	January 9, 2004
is collection of information in consisted by 27 CFD 4.5.				

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case, Any comments on the amount of time you require to complete this form and/or suggestions for P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, ALEXANDRIA, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



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US PATENT & TRADEMARK OFFICE

10/057, 518

Signature

PTO/SB/21 (08-03) (AW 10/2003)

Approved for use through 7/31/2006. OMB 0651-0031

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TDANSMITTAL		Application Number	10/057,518	UNASA.
TRANSMITTAL FORM		Filing Date	January 24,	2002 2011 1211 15 71 2: -
		First Named Inventor	RAY	
(to be used for all correspondence after initi	al filing)	Art Unit	1756	US PATENT & TRADENIARI
		Examiner Name	Daborah Cha	O'SEY'E
Total Number of Pages in This Submiss	ion 8	Attorney Docket No.	KPG-5044U	<u> </u>
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	T	ES (Check all that	apply)	
Fee Transmittal Form Fee Attached Amendment/Reply After Final Affidavits/Declaration(s) Extension of Time Request Express Abandonment Request Information Disclosure Statement Certified Copy of Priority Document(s)	Petition Provisi Power Chang Addres Termin Reques	ing-related Papers n to Convert to a contain Application of Attorney, Revocation of Correspondence	on.	After Allowance Communication to Group Appeal Communication to Board of Appeals and Interferences Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) Proprietary Information Status Letter Other Enclosure(s) (please identify below): Return Receipt Card
Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53	Remarks:			
SIGNATURE	OF APPLICA	NT, ATTORNEY O	R AGENT	
Firm or Individual Pamela D. Politis		Registration No. (Attorn		47,865
Signature Movember 7, 2003	0			

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Date

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, ALEXANDRIA, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Amendment Dated: November 7, 2003 Reply to Office Action of August 8, 2003 PAREG-5044US JANUE DIM'S DE

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE PATENT & TRADEMARK

OFFICE

Appln. No:

10/057,518

Applicant: Filed:

Kevin Ray, et al. January 24, 2002

Title:

WATER-DEVELOPABLE NEGATIVE-WORKING ULTRAVIOLET AND INFRARED

IMAGEABLE ELEMENT

TC/A.U.:

1756

Examiner:

Daborah Chacko Davis

Confirmation No.: 3061

Docket No.:

KPG-5044US

AMENDMENT

Mail Stop Non-Fee Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Responsive to the Office Action dated August 8, 2003, please amend the aboveidentified application as follows:

\boxtimes	Amendments to the Specification begin on page 2 of this paper.
of this	Amendments to the Claims are reflected in the listing of claims which begins on page
☐ replace	Amendments to the Drawings begin on page of this paper and include an attached ement sheet(s).
□ Abstrac	Amendments to the Abstract are on page of this paper. A clean version of the ct is on page of this paper.
\boxtimes	Remarks/Arguments begin on page 3 of this paper.

Amendment Dated: November 7, 2003 Reply to Office Action of August 8, 2003 KAGES044US

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US PATENT & TRADELIALK OFFICE

Amendments to the Specification:

Please replace the paragraph at page 9, lines 9-17, with the following rewritten paragraph.

Thermal imaging may be carried out with a laser or an array of lasers emitting modulated near infrared or infrared radiation in a wavelength region that is absorbed by the element. Infrared radiation, especially infrared radiation in the range of about 800 nm to about 1200 nm, is typically used for imaging a thermally imageable element. Imaging is conveniently carried out with a laser emitting at about 830 nm or at about 1056 nm. Suitable commercially available imaging devices include image setters such as a Green the CREO® Trendsetter (CREO Corp., Burnaby, British Columbia, Canada) and a Gerber Crescent 42T (available from the Gerber Corporation). Preheating of the imageable element is not required.

Please replace the paragraph at page 13, lines 18-25, with the following rewritten paragraph.

A sample of each imageable element was imaged using an internal test pattern with Cree a CREO® Trendsetter (CREO, Burnaby, BC, Canada) thermal exposure device having laser diode array emitting at 830 nm with an imaging energy density of 300 mJ/cm². Each sample was heated in an oven at 130°C for 1 min and developed with water as described above. In each sample the exposed regions remained after development, leaving an accurate copy of the mask image. The sample from Example 1, for example, appeared to be at least 2-98% dots at 150 lines per inch.

Amendment Dated: November 7, 2003 Reply to Office Action of August 8, 2003 PATENT MANUEL ANCE

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Remarks/Arguments:

US PATENT & TRADEMARK OFFICE

Amendments

The specification has been amended to indicate a registered trademark. It is submitted that no new matter is introduced by these amendments.

Rejection under 35 USC 102

Claims 1, 9-13, 19-23, and 26 were rejected under 35 USC 102(b) as anticipated by Van Damme, EP 0 819 985 ("Van Damme"). This rejection is respectfully traversed.

Applicants claims recite an imageable composition that comprises a "water-soluble or water-dispersible binder." Further, claims 1-24 recite that the imaged imageable element is developed with water.

1. Water-soluble binder or water-dispersible binder

Van Damme discloses a radiation sensitive imaging element comprising on a hydrophilic surface of a lithographic base an image forming layer comprising (1) an alkali soluble or swellable resin having a phenolic hydroxy group, (2) a latent Brönsted acid, and (3) an infrared absorber, characterized in that said image forming layer comprises an amino crosslinking agent. Van Damme, Abstract.

The Office asserts that Van Damme discloses an imaging element that comprises "a water-soluble binder (hydrophilic binder)." Office action of 8/8/03, page 2, line 21. This assertion is respectfully traversed.

Applicants' initially note that, contrary to the assertion, 'water-soluble" and "hydrophilic" are not synonyms. Hydrophilic means that a material has an affinity for, attracting, adsorbing, or absorbing water. A hydrophilic material may be water-soluble, but not all hydrophilic materials are water-soluble.

The Office refers to page 5, lines 29-36. This passage and the paragraph before and the paragraph after read as follows:

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According to another embodiment in connection with the present US PATENT & TRADELIZATION invention, the <u>lithographic base</u> comprises a flexible support, such as e.g. pape OFFICE or plastic film, provided with <u>a cross-linked hydrophilic layer</u>. A particularly suitable cross-linked hydrophilic layer may be obtained from <u>a hydrophilic binder cross-linked with a cross-linking agent</u> such as formaldehyde, glyoxal, polyisocyanate or a hydrolysed tetra-alkylorthosilicate. The latter is particularly preferred.

As hydrophilic binder there may be used hydrophilic (co)polymers such as for example, homopolymers and copolymers of vinyl alcohol, acrylamide, methylol acrylamide, methylol methacrylamide, acrylic acid, methacrylic acid, hydroxyethyl acrylate, hydroxyethyl methacrylate or maleic anhydride/vinylmethylether copolymers. The hydrophilicity of the (co)polymer or (co)polymer mixture used is preferably the same as or higher than the hydrophilicity of polyvinyl acetate hydrolyzed to at least an extent of 60 percent by weight, preferably 80 percent by weight.

The amount of <u>crosslinking agent</u>, in particular of tetraalkyl orthosilicate, is preferably at least 0.2 parts by weight per part by weight of hydrophilic binder, preferably between 0.5 and 5 parts by weight, more preferably between 1.0 parts by weight and 3 parts by weight.

Van Damme, page 5, lines 25-36 (emphasis added)

When the cited paragraph is read in context, it is readily apparent that the hydrophilic binder in question is used to form a cross-linked hydrophilic layer, which provides the hydrophilic surface of the lithographic base. In Van Damme, the imaging forming layer is on the hydrophilic surface of the lithographic base so the binder is not part of the imaging layer. See, for example, claim 1.

Further, the hydrophilic binder is cross-linked so it will be insoluble in developers and fountain solution. During lithographic printing the hydrophilic surface revealed by the imaging and developing steps takes up water or a fountain solution. *See*, for example, Van Dame, page 1, lines 15-22, and specification of the instant application, page 1, lines 9-16. If the binder of

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Appln. No.: 10/057/518

Amendment Dated: November 7, 2003 Reply to Office Action of August 8, 2003

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Van Damme were water-soluble, it would be removed during the principal and development steps, totally defeating its purpose.

Therefore, the binder disclosed by Van Damme:

- is hydrophilic, not water-soluble;
- 2) is part of the hydrophilic surface of the lithographic base, not part of the imaging layer; and
 - 3) is cross-linked , making it insoluble in water.

Van Damme does disclose a binder for the imaging layer:

The functioning of the plate as a negative-working plate is <u>critically</u> <u>dependent</u> upon the use of a mixture of an amino crosslinking agent and a [sic] <u>alkali soluble or swellable resin having a phenolic hydroxy group</u> since the use of either compound alone does not provide a useful developed image.

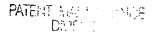
Van Damme, page 3, lines 25-27 (emphasis added).

Suitable resins having phenolic hydroxy groups for use in an image forming layer in connection with this invention are for example synthetic <u>novolac resins</u> such as ALNOVOL, a registered trade mark of Reichold Hoechst and DUREZ, a registered trade mark of OxyChem and synthetic polyvinylfenols [sic, polyvinylphenols] such as MARUKA LYNCUR M, a registered trade mark of Dyno Cyanamid.

Van Damme, page 3, lines 45-48 (emphasis added).

As described in the specification, "[p]henolic resins, such as resole resins, novolac resins, and polyvinyl phenols, can not be used in the imageable elements of the instant invention because they do not produce water-developable compositions." Specification, lines 23-25. Therefore, the resins used in the imaging layer of Van Damme can not be used in the imageable layer of the instant invention.

Amendment Dated: November 7, 2003 Reply to Office Action of August 8, 2003



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It is axiomatic that for a prior art reference to anticipate under § 102 it has to meet every element of the claimed invention. . . ." Hybritech Ing. We Monoclonal Antibodies, Inc., 231 U.S.P.Q. 81, 90 (Fed. Cir. 1980) (emphasis added). Van Damme does not disclose a imaging element in which the imaging layer comprises a "water-soluble or water-dispersible binder" as recited by applicants' claims. The rejection of claims 1, 9-13, 19-23, and 26 as anticipated by Van Damme should be withdrawn.

2. Developing in Water

The Office asserts that Van Damme discloses "developing the imaged layer with an aqueous developer" and cites page 2, line 57, to page 3, line 9, and page 6, lines 12-13, of Van Damme. However, applicants' claims 1, 9-13, and 19-23 each recite developing the imaged imageable element with water, not with "an aqueous developer."

The imaged element of Van Damme is developed with an <u>alkaline</u> developing solution. Van Damme, page 3, lines 8-9; page 6 lines 12-18; and claim 10. Example 1 uses Fuji PS-plate developer DP-5. Van Damme, page 7, lines 41-43. Fuji PS-plate developer DP-5 is an described as "an alkaline aqueous developer." Van Damme, page 6, lines 14-18. As disclosed on page 2, lines 10-15 of the specification, by the use of water as the developer, applicants' avoid the environmental problem associated with the use of alkaline developers, such as the alkaline developers disclosed by Van Damme.

Developing the imaged imageable element with water is not disclosed by Van Damme. For this additional reason, the rejection of claims 1, 9-13, and 19-23 as anticipated by Van Damme should be withdrawn.

Rejection under 35 USC 103

Claims 2-8, 14-18, 24-25, and 27-28 were rejected under 35 USC 103(a0 as unpatentable over Van Damme in view of Murakami, U.S. Patent 4,425,405 ("Murakami"). This rejection is respectfully traversed.

Murakami was cited to show that vinylpyrrolidone/vinyl acetate is a water-soluble polymer. Murakami discloses an ink jet recording sheet. Murakami, Title. It does not overcome the deficiencies of Van Damme, discussed above.

Amendment Dated: November 7, 2003 Reply to Office Action of August 8, 2003 PATENT KPG-\$044US

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The Office has not made the *prima facie* case. Combination of Van Damme and & TOPFICE OFFICE

Murakami in the manner indicated by the Office does not produce applicants' invention. The rejection of claims 2-8, 14-18, 24-25, and 27-28 as unpatentable over Van Damme in view of Murakami should be withdrawn.

Conclusion

It is respectfully submitted that the claims are in condition for immediate allowance and a notice to this effect is earnestly solicited. The Examiner is invited to phone applicants' attorney if it is believed that a telephonic or personal interview would expedite prosecution of the application.

Respectfully submitted,

Bruce M. Monroe, Reg. No. 33,602 Pamela D. Politis, Reg. No. 47,865 Attorney and Agent for Applicant

Dated: November 7, 2003

RatnerPrestia P.O. Box 1596 Wilmington, DE 19899 (302) 778-2500 FAX: (302) 778-2600

The Commissioner for Patents is hereby authorized to charge payment to Deposit Account No. 18-0350 of any fees associated with this communication.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:

november 7,200.

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